

PATENT SPECIFICATION

739,405



Date of Application and filing Complete Specification: Feb. 3, 1954.

No. 3180/54.

Application made in Sweden on Feb. 5, 1953.

Complete Specification Published: Oct. 26, 1955.

Index at acceptance:—Classes 83(2), A115; and 89(1), A3.

COMPLETE SPECIFICATION

Cap Nut

We, ALLMANNA SVENSKA ELEKTRISKA
AKTIEBOLAGET, a Swedish Company, of
Vasteras, Sweden, do hereby declare the in-
vention, for which we pray that a patent may
be granted to us, and the method by which
it is to be performed, to be particularly de-
scribed in and by the following statement:—

Hitherto known cap nuts have been manu-
factured from bar material by turning and
thread-cutting. Apart from the fact that much
material is wasted by such a method of manu-
facture, the time of manufacture is also long,
especially due to the fact that each nut has
to be screw-threaded individually. The pre-
sent invention relates to a cap nut which
may be manufactured considerably more
cheaply than hitherto, and the invention is
characterised in that the nut is a common open
nut having a cap made from sheet metal se-
cured at one end by projection-welding. Since
normal cheap methods may be used in the
manufacture of the nuts and since the caps
can be fabricated cheaply by pressing or
drawing, the manufacturing costs of the cap
nuts according to the invention are much
lower. In addition, the quantity of material
required for the cap is considerably less than
in the case of cap nuts turned from a solid
workpiece.

In the accompanying drawing Figure 1
shows a cap nut according to the invention,
Figures 2 and 3 show two steps in the manu-
facture of one form of the cap, and Figure
4 shows a modified form of the cap. The
cap may be manufactured by punching cir-
cular discs from sheet metal, which are there-
after pressed or stamped into the required
convex or hemi-spherical shape. At the same
time the cap is provided with a flange 2
projecting laterally, i.e. at a right angle to the
cap axis the outer edge of which flange may
be bent as shown in Figure 3 in a separate
manufacturing operation, so that an axially
extending edge 3 is obtained. The cap is then

projection-welded on one end of a nut 4, the
edge 3 causing a concentration of current at
the contact surface between the cap and the
nut 4, which facilitates the welding process.

In the embodiment of the cap shown in
Figure 4, the required concentration of current
is obtained by providing the flange 2 with
a downwardly directed ridge 5.

In the manufacture of cap nuts according
to the invention, a considerable amount of
both material and working time is saved. It
is especially advantageous that, in manufactur-
ing cap nuts according to the invention,
common nuts manufactured by mass-produc-
tion may be used. The welding of the caps
gives a joint which does not require finish-
ing to give the nut a neat appearance.

What we claim is:—

1. A cap nut consisting of a common nut
having a sheet metal cap fixed on one end
by projection-welding.

2. A cap nut as claimed in claim 1, where-
in the cap is a sheet metal punching formed
into convex shape by pressing.

3. A cap nut as claimed in claim 1 or
2, wherein prior to fixing the cap is pro-
vided at the edge with a flange projecting
substantially at a right angle to its axis, the
outer edge of said flange being bent down-
wardly so that it is substantially parallel with
the axis of the cap.

4. A cap nut as claimed in claim 1 or 2,
wherein prior to fixing the cap is provided
at the edge with a flange projecting sub-
stantially perpendicular to its axis, said flange
being provided with a downwardly directed
ridge.

5. A cap nut substantially as herein des-
cribed with reference to Figures 1 to 3 or
Figures 1 and 4 of the accompanying draw-
ing.

J. Y. & G. W. JOHNSON,
47, Lincoln's Inn Fields, London, W.C.2,
Chartered Patent Agents.

739,405 COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of
the Original on a reduced scale.

Fig.1

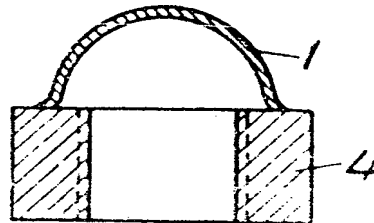


Fig.2



Fig.3

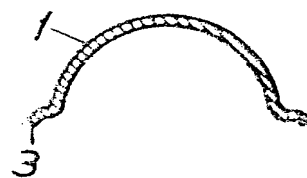


Fig.4

